JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -2 EXAMINATION- APRIL 2018

B.Tech VI Semester

COURSE CODE: 11B1WCI611   MAX. MARKS: 25

COURSE NAME: Computer Graphics

COURSE CREDITS: 04   MAX. TIME: 1Hr 30 Min

Note: All questions are compulsory. Carrying of mobile phone during examinations will be treated as case of unfair means.

1. We need to view a triangle {(1,0), (2,1), (3,0)} after reflection about the line y = x. Derive two different methods to perform the same task, i) by rotation and shifting of points of triangle and ii) by moving the coordinate axis followed by change in sign of points of triangle. Explain both the methods using mathematical functions or matrix also include efficiency and correctness.

[4+4]

2. Write Cohen-Sutherland algorithm for line clipping. Clip line (2,12), (12,2) by window with diagonal (5,5), (10,10) using the same.   [4+5]

3. Write short notes on: [2 x 4]

   a) Flood filling
   b) Pre-filtering for anti-aliasing
   c) Shearing/Slanting of shape
   d) Inside-outside test